

**CURRICULUM VITAE OF  
FARES MOKHTARI**

Professor of mathematics  
Department of Mathematics and Informatics  
Univ of Benyoucef Benkhadda, Algiers, Algeria  
Tel: (213) 551214454  
E-mail: fares\_maths@yahoo.fr

**Personal data**

First name: Fares  
Name: MOKHTARI  
Date of birth: December 16<sup>th</sup>, 1975  
Place of birth: Ain Elhadjel, Algeria  
Nationality: Algerian  
Marital status: married, four children

**Address**

Department of Mathematics, Univ of Benyoucef Benkhadda, 2 rue Didouche Mourad, Algiers, Algeria.

**Current position**

Professor

**Course of study**

- 1993 Bachelor's degree
- 1997 Diploma of superior studies in Mathematics, ENS-Kouba Algeria.  
Mention: very good
- 2002 Magister in Mathematics, ENS-Kouba.  
Mention: Good
- 2011 Doctorate Thesis, ENS-Kouba.  
Mention: very honorable.
- 2014 Habilitation Thesis, USTHB-Alger, Algeria.
- 2019 Professor, University of Algiers, Algeria.

**Secondary school teacher**

1998-1999 School of Bouira, Algeria.

## Visiting Positions

2007, 2009, 2010- Visitor, France University (Poitiers).

2011- La Rochelle, 2014- Bordeaux, France University.

2014- Institut de Mathématiques de Bordeaux UMR CNRS 5251, Université Victor Segalen Bordeaux 2, France.

2018- University of Paris 6.

## Magister

Department of mathematics, ENS-Kouba, 2002. Advisor: Pr. Youcef Atik. Title:

- Nonlinear elliptic parabolic problems with measures data : Existence, regularity and behavior of solutions.

## Doctorate degree

Title: Anisotropic parabolic problems with measures or Orlicz data.

Thesis advisor: Youcef Atik

Defended on September 15, 2011 at the ENS of Kouba, Algiers.

Jury members: Youcef Atik, Abdelhafid Mokrane, Hacem Ouazar, J. M. Rakotoson (Univ of Poitiers, France), Said M. Moulay, Mohamed Boukra.

## Habilitation degree

Title: Anisotropic parabolic and elliptic equations with irregular data.

Defended on 02-23, 2014 at Department of mathematics, USTHB-Bab Ezzouar. Algeria.

## Supervision activities

### Memoirs of License

Supervisor of 10 memoirs of License at ENS Kouba.

### Memoirs of master

- Hamidi Lalia, Equations elliptiques et anisotropes non linéaires, Université de Média, Defended on 18/06/2018.
- Kherbachi Nadjat, Etude d'un problème elliptique a donné mesure, Université de M'sila, Defended on 25/06/2019.
- Ould Cherchali Soulaf, Sur les Espaces D'Orlicz, Université de Média, Defended on 08 /07 /2019.
- Aliane Soumia, Existence et régularité de la solution de quelques problèmes elliptiques dégénérés, University of Algiers, Defended on 26/09/2020.
- Abderrahmane Zouagui, Nonlinear degenerate elliptic problems With  $W_0^{1,1}(\Omega)$  solutions, University of Algiers, Defended on 14/10/2021.

## Memoirs of magister

- Salim Adjmi. Anisotropic elliptic equations in  $\mathbb{R}^N$  with locally integrable data. Defended on 04/02/2016.
- Rabeh Mecheter. Anisotropic parabolic equations with measures data. Defended on 06-03, 2013 at Department of mathematics, Univ-M'sila.

## Doctorate thesis in preparation

- Nour Allaoui, On the degenerate elliptic systems with  $L^m$  data, USTHB.
- Benaichouche Noureddine, On solutions of degenerate anisotropic elliptic unilateral problems, University of Djillali Liabes, SIDI BEL ABBES
- Hellal Abdelaziz. Anisotropic elliptic and parabolic equations with variable exponents and  $L^1$  data. ENS-Kouba, Algeria.
- Dechoucha Noreldin. Anisotropic elliptic equations in  $\mathbb{R}^N$  with variable exponents and locally integrable data. Univ-M'sila.
- Zouatini Mohamed El Amine. Singularity of Anisotropic elliptic equations with variable exponents. ENS-Kouba, Algeria.
- Teyar Abla. On the elliptic system with variable exponents and irregular data. Constantine, Algeria.

## 0.1 Defended theses

- Houcin Ayadi. Existence and Regularity of Solutions of an Anisotropic Elliptic Problem with Variable Exponents and Degenerate Coercivity. Univ-M'sila. Defended on 17/06/2020.
- Mokhtar Nacri. Anisotropic Nonlinear Systemes with Variable Exponents and irregular Data. ENS-Kouba. Defended on 25/06/2020.
- Rabeh Mecheter. Degenerate Anisotropic parabolic equations in  $\mathbb{R}^N$  with variable exponents and locally integrable data. Univ-M'sila. Defended on 26/11/2020.
- Khelifi Hicham. Nonlinear Degenerate Anisotropic Elliptic Equations with Variable Exponents and  $L^1$  data. Univ-Annaba. Defended on 30/03/2021.

## Research areas

1. Boundary value problems
2. Anisotropic Spaces
3. Anisotropic parabolic and elliptic equations

4. Variational methods
5. Sobolev space with variable exponents
6. Analysis and numerical analysis of partial differential equations by finite elements, finite differences or finite volume.

## Papers

1. Anisotropic parabolic problems with measures data. *Differential Equations and Applications*. 2010; **2** (1):123–150.
2. Anisotropic parabolic problems with Orlicz data. *Mathematical Methods in the Applied Sciences* 2011; **34** (17):2095–2102.
3. Nonlinear anisotropic parabolic equations in  $\mathbb{R}^N$  with locally integrable data. *Mathematical Methods in the Applied Sciences* 2013; **36**:196–207.
4. Nonlinear anisotropic parabolic equations in  $L^m$ . *Arab J Math Sci* 2014; **20** (1):1-10.
5. Anisotropic parabolic equations with lower-order term and  $L^m$ -data. Algerian Turkish International days on Mathematics. Fatih University, Istanbul, Turkey, (2013).
6. With M. Chrif and S. El Manouni, Strongly anisotropic elliptic problems with regular and  $L^1$  data. *portugaliae Mathematica* 2015; **72** (4):357–391.
7. Regularity results for anisotropic parabolic equations with  $L^1$  data. *Journal of pure and applied mathematics: Advances and applications* 2015; **13** (2):115–136.
8. With K. Bachouche and H. Abdelaziz, Nonlinear elliptic equations with variable exponent and measure or  $L^m$  data. *Journal of Mathematical Sciences: Advances and Applications* 2015; **35**:73–101.
9. With M. Bendahmane, Nonlinear elliptic systems with variable exponents and measure data. *Moroccan Journal of Pure and Applied Analysis* 2015, 1(2):108–125.
10. Nonlinear anisotropic elliptic equations in  $\mathbb{R}^N$  with variable exponents and locally integrable data. *Mathematical Methods in the Applied Sciences* 2017, (40):2265–2276.
11. T-set for nonlinear elliptic equations with variable exponents and measure data (Conference paper) TAMTAM, 10-13 Mai, TUNISIE 2017, To appear.
12. Regularity of the solution to nonlinear anisotropic elliptic equations with variable exponents and irregular data. *Mediterranean Journal of Mathematics*, 14:141 (2017).
13. With Ayadi Houcin. Nonlinear Anisotropic Elliptic Equations with Variable Exponent and Degenerate Coercivity. *Electronic Journal of Differential Equations*, Vol. 2018 (2018), No. 45, pp. 1–23.

14. F. Mokhtari and R. Mecheter. Anisotropic degenerate parabolic equations with variable exponents in  $R^N$ . *Mediterranean Journal of Mathematics*. DOI: 10.1007/s00009-019-1331-0. (2019).
15. Houcin Ayadi and F. Mokhtari. Entropy solutions for nonlinear anisotropic elliptic equations with variable exponents and degenerate coercivity. *Complex Variables and Elliptic Equations*. <https://doi.org/10.1080/17476933.2019.1615899> (2019).
16. M. Naceri and F. Mokhtari. Anisotropic nonlinear elliptic systems with variable exponents and degenerate coercivity. *Applicable Analysis*. (2021) 100(11)2347–2367
17. H. Khelifi and F. Mokhtari. Nonlinear Degenerate Anisotropic Elliptic Equations with Variable Components and  $L^1$  data. *J. Part. Diff. Eq* 33, 1-16 (2020).
18. N Benaichouche, H Ayadi, F Mokhtari, A Hakem. Existence and regularity results for nonlinear anisotropic unilateral elliptic problems with degenerate coercivity, *Journal of Elliptic and Parabolic Equations*, (2022) 1–25.
19. H. Abdelaziz and F. Mokhtari. Nonlinear anisotropic degenerate parabolic equations with Variable Exponents and Irregular Data, *Journal of Elliptic and Parabolic Equations*, *Journal of Elliptic and Parabolic Equations*, (2022).

### Submitted papers

1. N. Dechoucha and F. Mokhtari. Anisotropic degenerate elliptic problems in  $\mathbb{R}^N$  with variable exponent and irregular data.
2. H. Khelifi and F. Mokhtari. Regularity Results For Degenerate Parabolic Equations With  $L^1$  Data.

### Administrative posts

1. 2019-2022 Vice Rector of Development, Foresight and Orientation at University of Algiers, Algeria.
2. 2015-2018 Vice Dean charge of studies and questions related to students at Faculty of Sciences, University of Algiers. Algeria.

### Teaching experience

2012–2015 Convexity and Optimization (S4 LMD), Recherche opérationnelle (S2 LMD), Inférence statistique (S1 LMD).

2011–2013 Analysis (first year undergraduate students). ENS-Kouba.

2009–2012 Analysis (second year undergraduate students).

2003–2010 Responsible of the module "Analysis for commercial sciences" (first and second year undergraduate students).

2003–2010 Responsible of the module "Algebra for commercial sciences" (first year undergraduate students).

2001–2003 Analysis and Differential Calculus (second year undergraduate students). ENS-Kouba.

2001–2002 Measures and Integration (third year undergraduate students). ENS-Kouba.

## Duplicated lecture notes

- The algebra 1 for the first grade, Duplicated lecture notes, ENS-Kouba, 2005.
- The algebra 2 for the first grade, Duplicated lecture notes, ENS-Kouba, 2006

## International talks and Seminars

1. April. 2006 (RAMA 5) International Meeting of mathematical analysis and its applications, M'sila. Algeria. Title: L'étude d'une equation changeant de type elliptique parabolique à données mesures.
2. November. 2007 (ANL'07) Second International Colloquium on Nonlinear Analysis and Applications. Sétif. Algeria. Title: Etude d'un problème doublement non linéaire elliptique parabolique à données mesures.
3. April 2008. seminar at Laboratoire des EDP non linéaires, ENS-Kouba, Algeria. Title: Anisotropic Sobolev inequality.
4. Mars. 2010. Seminar at Laboratoire des EDP non linéaires, ENS-Kouba, Algeria. Title: Elliptic equation in  $L^m$ .
5. October 2010 (RAMA'07) International Meeting of mathematical analysis and its applications. Batna. Algeria. Title: Anisotropic parabolic problems with measures data.
6. Mars. 2011. Seminar at Laboratoire des EDP non linéaires, ENS-Kouba, Algeria. Title: Parabolic equations in  $R^N$  with locally integrable data.
7. Mars. 2012 (CMA '12) Congress of Algerians Mathematicians. Annaba. Algeria. Title: Anisotropic parabolic problems with Orlicz data.
8. May 2012 (ICPAM'12) International Conference on Pure and Applied Mathematics. Guelma. Algeria. title: Anisotropic parabolic equations in  $R^N$  with locally integrable data.
9. November. 2012 (DIMACOS'12) International Conference on Discrete Mathematics and Computer Science. Beirut. Lebanon. Title: Regularity results for nonlinear anisotropic parabolic equations with a lower order term and  $L^1$  data.
10. November. 2012 (RAMA8)-8 eme Rencontre d'Analyse Mathématique et ses Application, Tipaza. Algeria. Title: Some regularity results for some nonlinear anisotropic parabolic equations with a lower-order term.

11. February. 2013 Congrès International du LEM2I, ENIM-Rabat-Maroc. Title: Regularity for nonlinear anisotropic parabolic equations with Orlicz data.
12. April 2013 (TAMTAM XIII)-6ème colloque sur les Tendances dans les Applications Mathématiques en Tunisie, Algérie, Maroc. USTHB-Alger.
13. September 2013 The Algerian-Turkish international days on mathematics, Fatih University, Istanbul, Turkey.
14. November. 2014 (RAMA9)-9 eme Rencontre d'Analyse Mathématique et ses Application, Laghouat. Algeria. Title: Anisotropic elliptic problems with variable exponents and measure data.
15. May 2015 (TAMTAM XIII)-7ème colloque sur les Tendances dans les Applications Mathématiques en Tunisie, Algérie, Maroc. Tanger-Maroc. Title:  $p(x)$  Laplacien with measure data.
16. February. 2016 (RAMA9)-9 eme Rencontre d'Analyse Mathématique et ses Application, Ouargla. Algeria. Title: Elliptic equations with variable exponents and  $L^m$  data.
17. Mars. 2016 Tunisie.  $p(x)$ – Laplacien with measure data.
18. February 2019 TAMTAM-9ème : Anisotropic elliptic equations with variable exponents and locally integrable data. Colloque sur les Tendances dans les Applications Mathématiques en Tunisie, Algérie, Maroc. Tlemcen-Algérie.  
Istanbul, Turkey.

## Research

1. President of research group (PRFU 2019-2023) at Department of mathematics and Informatics, university of Benyoucef Benkhedda. Algiers, Algeria.

Elliptic and parabolic equations in Sobolev space with variable exponents.

2. Member of CNEPRU 2016-2019 at ENS-KOUBA.
3. PRFU project manager 2019-2023 at Algiers University.

## Workshops

1. May 2005 Workshop on Nonlinear Partial Differential Equations. 23-26 May. Tipaza. Algeria
2. May 2006 Workshop on Abstract Differential Equations. 13-18 May. Tipaza. Algeria.
3. June 2010 Scientific Days (LEM2I). Tipaza. Algeria.
4. May 2012 Days Differential Equations in honor of M. A. Moussaoui. Algeria.

## **Typesetting systems**

Good of knowledge of Tex, Latex, and Arabtex.